



FBB3370 Frontiers in Metabolic Engineering I 3.0 credits

Kunskapsfronten inom metabolisk ingenjörskonst I

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for FBB3370 valid from Autumn 2015

Grading scale

Education cycle

Third cycle

Specific prerequisites

Civ Ing or Master degree in Biochemistry, Chemical Engineering, Molecular Biology, Biotechnology.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

The goal of this course is to train students in how to understand, contextualize, and present research papers in the field of metabolic engineering. On completion of the course, the student should be able to:

- Critically assess research in terms of scientific quality, novelty, and importance to the field
- Summarize the findings of a research paper and relate these findings to specific works of others in the field
- Present research in an interesting and stimulating way.

For whom:

PhD students in the field of metabolic engineering

Course contents

The course is a bi-weekly seminar. For each meeting, a "presenting" student chooses a research paper, which they will read critically. The presenting student will prepare a written summary and assessment of the paper, including how the paper's findings can be extended to the work of others. All course members are tasked to critically read the paper and to prepare at least one question. During the bi-weekly seminar, the presenting student summarizes and interprets the paper. Alternatively, the student can present their own research project. In this case they must provide a research paper for others to read in advance for background, context and comparison. All students are expected to engage in critique and discussion. Presenting student rotates.

Disposition

Literature review

Research review

Presentations

Written summaries and reflections

20 sessions per year

Course literature

Research papers selected by student and examiner.

Examination

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Other requirements for final grade

Written reflection and presentation on 2 research papers per year. Active participation during others presentations. The credits are given after attendance at 16 out of 20 sessions during a full year, and after two own presentations.

P/F

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.